3G Modem Firmware Update

From v26 to v28

APPLICATION NOTE

AUG-0083-00 1.0 en-US ENGLISH
Important User Information

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1 Preface

1.1 About This Document

This document explains how to update the modem firmware of your Ewon Cosy 131 or Ewon Flexy if this one embeds a 3G modem.

For additional related documentation and file downloads, please visit www.ewon.biz/support.

1.2 Document history

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<tr>
<th>Version</th>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.0</td>
<td>2019-05-12</td>
<td>First release</td>
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1.3 Related Documents

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<th>Document</th>
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1.4 Trademark Information

Ewon® is a registered trademark of HMS Industrial Networks SA. All other trademarks mentioned in this document are the property of their respective holders.
2 Introduction

This document explains how to perform a modem firmware update on an Ewon Cosy 131 or Ewon Flexy extension cards with 3G capabilities.

This modem firmware brings the following adjustments:

- an overall improvement for all users;
- bugs fixing implying instability due to mobile ISP modification of their cellular networks.
3 Update for Specific Ewons

Not all 3G modem-based Ewons are concerned by this update. Hereunder, we describe how to identify the compatible Ewons.

3.1 Part Numbers

You can check if your Ewon needs a modem firmware update by verifying its part number. The part numbers that are involved are the following ones:

- Cosy 131 3G cellular with the part number EC6133D_01
- Flexy extension card 3G with the part number FLB3202_01

3.2 Retrieve the Part Number

Cosy 131 — EC6133D_01

You can retrieve the part number of a Cosy 131 through two different methods:

- Check the right-sided label on the Cosy itself.
- Look at the bottom of the screen when browsing the dashboard of the Cosy web interface.
You can verify the part number of a Flexy extension card through two different methods:

- Check the white label on the Flexy extension card itself.
- Go to Ewon web interface » Status » System Info » System when browsing the web interface of the Flexy.
4 Upgrade the Modem Firmware

To upgrade the modem firmware, you can choose between 3 different methods:

- Use the SD card commissioning.
- Use the FTP server of your Ewon.

4.1 SD Card Commissioning

The SD card solution is the easiest solution to update the modem firmware if you have a physical access to your Ewon.

To perform the modem firmware update through the SD card commissioning, you need the following items:

- An SD card of FAT32 format with a recommendation that its capacity does not exceed 8GB.
- The modem update file represented as an .edf file: [https://resources.ewon.biz/download/firmware/3g-modem-update-26-28](https://resources.ewon.biz/download/firmware/3g-modem-update-26-28)

You must perform the following procedure while the Ewon is already powered on.

Update the modem firmware through SD card

1. Open the zip file labeled “Ewon - Modem HE910 FW Update - v26 to v28”.
2. Copy the “ewonfwr.edf” file on the SD card.

You might need to copy the .edf file first on your computer, then on the SD card.
3. Insert the SD card into the Ewon.
   - First, the USR LED blinks quickly orange (ON/OFF each 200ms). This phase indicates the Ewon is checking the validity of the SD card (e.g. proper format and valid files).
   - Second, the USR LED blinks slowly orange (ON/OFF each second). This phase indicates the Ewon is copying the file from the SD card to its internal memory.
   - Last, the USR LED turns steady green. The Ewon is ready to continue the procedure.
4. Remove the SD card from the Ewon.
5. The USR LED switches colors every second, between red and green. This phase can last from 5 to 15 minutes.
   - This phase indicates the Ewon is processing the update file.
6. Wait for the Ewon to reboot.
   - If the reboot occurs quickly after removing the SD card ► it is highly probable that the update did not occur (failed or update already performed previously).
   - If the reboot occurs a while after the SD card removal ► it is highly probable that the update succeeded.

4.1.1 Successfulness Verification

To verify that the update has successfully occurred, you must verify the log of your Ewon device.

To do so, go to Diagnostic ► Logs ► Event Logs.

If the update was a success, the Ewon should display the following logs:
Fig. 3 Modem update flow

If your Ewon device was already with the right version, the following log is recorded:

Fig. 4 No need of modem update

4.2 FTP Server

To perform the modem firmware update by using the FTP server of the Ewon, you need the following items:

- The modem update file represented as an .edf file: https://resources.ewon.biz/download/firmware/3g-modem-update-26-28
A connection to your Ewon using an FTP client software.

The Ewon can be reachable:
- because you are connected to the same physical network your Ewon is connected to;
- because you are connected to your Ewon through a VPN tunnel established by eCatcher.

**Update the modem firmware through Ewon FTP server**

1. Open the zip file labeled "Ewon - Modem HE910 FW Update - v26 to v28".
2. Extract the "ewonfwr.edf" file to your computer.
3. Open your FTP client.
   In our case, we use the FileZilla® software.
4. Establish a connection to your Ewon with the “Adm” username and password. You can use:
   - its LAN IP address if you are connected to the same network your Ewon is connected to.
   - its LAN IP or VPN address if you are connected to your Ewon through eCatcher.

![FTP connection to the Ewon](image)
5. Transfer the "ewonfwr.edf" file from your computer to the Ewon.

![Fig. 6 Transfer the update file](image1)

6. Close the FTP connection.

![Fig. 7 FTP disconnection](image2)

7. The USR LED switches colors every second, between red and green. This phase can last from 5 to 15 minutes.
   - This phase indicates the Ewon is processing the update file.

8. Wait for the Ewon to reboot.
   - If the reboot occurs quickly after closing the FTP connection, it is highly probable that the update did not occur (failed or update already performed previously).
   - If the reboot occurs a while after after closing the FTP connection, it is highly probable that the update succeeded.

### 4.2.1 Successfulness Verification

To verify that the update has successfully occurred, you must verify the log of your Ewon device.

To do so, go to **Diagnostic ➤ Logs ➤ Event Logs**.

If the update was a success, the Ewon should display the following logs:
If your Ewon device was already with the right version, the following log is recorded:

```
17/04/2020 14:03:13 1073764428: update.sh-port open
17/04/2020 14:03:13 1073764428: update.sh-restart modem
17/04/2020 14:03:13 1073764428: update.sh-shutdown modem
17/04/2020 14:03:13 1073764428: update.sh-port open
17/04/2020 14:03:13 1073764428: update.sh-complete ok
17/04/2020 14:03:13 1073764428: update.sh-streaming finished
17/04/2020 14:03:13 1073764428: update.sh-streaming finished
17/04/2020 14:03:13 1073764428: update.sh-waiting for progress info
17/04/2020 14:03:13 1073764428: update.sh-stopping update file 1352468
17/04/2020 14:03:13 1073764428: update.sh-loading update file
17/04/2020 14:03:13 1073764428: update.sh-fwVersion 12.00.026.1
17/04/2020 14:03:13 1073764428: update.sh-stopped
17/04/2020 14:03:13 1073764428: update.sh-port open
17/04/2020 14:03:13 1073764428: update.sh-open modem
```

Fig. 8  Modem update flow

Fig. 9  No need of modem update
5 Troubleshooting

Error: The Ewon does not reply anymore

The Ewon can take up to 15 minutes to perform the update. It may happen that the Ewon takes longer than expected to apply the update, reboot and be reachable again.

This doesn't necessarily mean the update failed:

- Make sure you wait long enough before checking if the Ewon is online/reachable again.
- If your Ewon is on a remote site and is configured to use a triggered connection, you need to send a wake-up sms again to switch the Ewon back online.